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Belyaeva, A. I., V. I. Silaev, and N. V. Gapon. Absorption Spectrum of Antiferromagnetic $CsMnF_3$ near the $^6A_{1g}(^6S) \rightarrow {}^4T_{1g}(^4G)$ Transition. (E) – 1503 [1800]

Belyakov, V. A. Dynamical Theory of Mössbauer Diffraction in Magnetically Ordered Crystals. (T) – 1824 [2170]

– Diffraction Maxima of Dynamic Origin. (T) – 2789 [3320]

– (See Aivazyan, Yu. M.) – 808 [968]

Bendeliani, N. A. (See Vereshchagin, L. F.) – 2051 [2452]

Bender, V. P. and V. M. Fridkin. Effects of Illumination on the Domain Structure of SbSI. (E) – 501 [614]

Benderskii, V. A. and A. G. Lavrushko. Reabsorption of Light and Photoconductivity of Anthracene Crystals. (E/T) – 1072 [1262]
– and A. G. Lavrushko. Investigations of Pulsed Photocurrents in Anthracene Crystals. (T/E) – 1280 [1528]
– (See Lavrushko, A. G.) – 225 [284]
– (See Lavrushko, A. G.) – 1223 [1467]
Bendik, N. T., V. S. Garnyk, and L. S. Milevskii. Effect of Fast Diffusing Impurities on the Etch Characteristics of Dislocations in Silicon. (E) – 1464 [1753]
Beneslavskii, S. D. Nonlinear Electrical Conductivity of Gapless Semiconductors. (T) – 1444 [1727]
Bengus, V. Z., S. N. Komnik, and E. D. Tabachnikova. Indirect Measurement of Dislocation Speed in Deformed KCl and LiF Crystals. (E) – 108 [135]
Bercha, D. M., V. Yu. Slivka, N. N. Syrbu, I. D. Turyanitsa, and D. V. Chepur. Anisotropy of the Reflection Spectra of SbSI Crystals. (E) – 217 [276]
– A. A. Kikineshi, I. P. Mikhal'ko, D. G. Semak, and D. V. Chepur. Relation between the Density of States, the Nature of the Local Centers, and the Layer-Like Structure of $A^{V}B_{3}^{VII}$ Compounds. (T/E) – 1905, [2272]
Berezhnoi, A. A. (See Adrianova, I. I.) – 2813 [3349]
Berezin, A. A. (See Kashkai, A. D.) – 2633 [3130]
Berozashvili, Yu. N., A. V. Dundua, and D. Sh. Lordkipanidze. Anisotropy of the Electroabsorption of Plane Polarized Light in Semiinsulating GaAs. (E) – 2669 [3172]
Bersenev, Yu. S. (See Fakidov, I. G.) – 1181 [1414]
Bershtein, V. A., Yu. D. Varfolomeev, and V. V. Nikitin. Chemical Bond Rupture at the Surface of Glass Studied by Multiple Internal Reflection Infrared Spectroscopy. (E) – 573 [693]
– L. D. Volovets, and V. A. Stepanov. Hardening of Glass under Loading at Normal Temperature. (E) – 606 [734]
Berzhanskii, V. N. (See Petrakovskii, G. A.) – 495 [607]
Bessonova, E. N. (See Pavlov, V. S.) – 745 [897]
Bezuglyi, P. A., R. O. Plakhotin, and L. M. Tarasenko. Velocities of Ultrasonic Waves in Polycrystalline Para-Hydrogen. (E) – 250 [309]
– L. M. Tarasenko, and O. I. Baryshevskii. Sound Velocity and Elastic Properties of Polycrystalline Krypton and Xenon. (E) – 2003 [2392]
Bichurin, M. I., P. Ya. Volkov, V. P. Zakharov, E. S. Kovalenko, V. A. Sen'kiv, A. I. Soldatov, and S. I. Chunyaeva. Electric Field in Paramagnetic Resonance of S-State Ions in Cadmium Tungstate. (E) – 594 [720]
Bir, G. L. Theory of Impurity States Lying in an Allowed Band. (T) – 371 [460]
– and O. A. Usov. Correction to the Article "Symmetry of the Phonon Spectrum in Rutile Crystals." (T) – 1548 [1846]
Bir, L. D., G. E. Pikus, L. G. Suslina, D. L. Fedorov, and E. B. Shadrin. Exciton Spectra and Exchange Interactions in Deformed ZnS Crystals Containing Stacking Faults. (T/E) – 3000 [3551]
Birinskii, Ya. I. (See Sinyakov, E. V.) – 3123 [3698]
Blekher, E. V. (See Smirnov, B. I.) – 2769 [3295]
Bliokh, Yu. P. (See Volkov, D. V.) – 1396 [1668]
Blistanov, A. A., A. N. Pavlov, and M. P. Shaskol'skaya. Influence of the Dissociation of Impurity Aggregates on Internal Friction in LiF : Mg^{2+} Single Crystals. (E) – 1593 [1901]
Boboev, T. B. (See Regel', V. R.) – 522 [635]
Bobrova, E. A., V. S. Vavilov, and G. N. Galkin. Interband Impact Recombination in Silicon and Germanium. (E) – 2982 [3528]
Bobrysheva, N. P. (See Ariya, S. M.) – 166 [213]
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– (See Bass, F. G.) – 1044 [1246]
Bogatova, T. B. (See Abdulsabirov, R. Yu.) – 2091 [2490]
Bogdanov, V. L., V. V. Lemanov, and N. K. Yushin. Collinear Interaction of Longitudinal Elastic Waves in Lithium Niobate Crystals. (E) – 1208 [1450]
– (See Grishmanovskii, A. N.) – 1537 [1833]
Bogomolov, V. N. Injection under High Pressure of Molten Metals into Crystalline Materials Containing Regular Cavities. (E) – 672 [815]
– N. A. Klushin, N. M. Okuneva, E. L. Plachenova, V. I. Pogrebnoi, and F. A. Chudnovskii. Phonon Spectrum of Gallium in Porous Glass. (E) – 1256 [1499]
– and A. I. Zadorozhnii. High-Pressure Mercury and Gallium Permeabilities of Diaphragms in Channels of NaX and NaA Zeolites. (E) – 2317 [2771]
– T. B. Zhukova, A. I. Zadorozhnii, and V. D. Tolmacheva. Behavior of the Lattice of NaX and NaA Zeolites on Filling Their Channels with Mercury under High Pressure. (E) – 2623 [3121]
– V. K. Krivosheev, and Yu. A. Kumzerov. Superconductivity of Mercury in Chrysotile Asbestoses. (E) – 3148 [3720]
– (See Barbanel, V. I.) – 1050 [1251]
– (See Abaev, M. I.) – 1323 [1578]
Boiko, B. T., L. S. Palatnik, and A. S. Derevyanchenko. Graphitization Mechanism for Thin Carbon Films. (E) – 499 [611]
– L. S. Palatnik, V. R. Kopach, A. N. Sinel'nikov, and V. B. Arakelyan. Height of the Potential Barrier and the Mass of Tunneling Electrons in an Island Condensate of a Metal on a Dielectric. (T/E) – 2352 [2804]
– (See Palatnik, L. S.) – 1880 [2240]
Boiko, I. I. and V. I. Pipa. Pinch Effect in Semiconductors in the Case of Strong Degeneracy of the Electron–Hole Plasma. (T) – 467 [579]
Boiko, Yu. I., Ya. E. Geguzin, and A. K. Emets. Deformation Characteristics in the Region of a CsI Crystal Irradiated by a Pulsed Laser Beam. (E) – 2596 [3096]
Bokov, V. A., S. I. Yushchuk, G. V. Popov, N. N. Parfenova, and A. G. Tutov. Magnetic Structure and Exchange Interactions in $Bi_2Fe_4O_9$. (T) – 1333 [1590]
Bokut', B. V. and A. N. Serdyukov. Nonlinear Interaction of Waves in Nonenantimorphous Crystals of the Class 42m Isotropic at a Particular Wavelength. (T) – 2418 [2873]
Bol'shov, L. A. Thermodynamics of Adsorbed Monatomic Layers. (T) – 1404 [1679]
Boltaks, B. I., M. K. Bakhadyrkhanov and G. S. Kulikov. Electrical Properties and Decomposition of the Solid Solution of Iron in Silicon. (E) – 2240 [2675]
– M. K. Bakhadyrkhanov, and P. P. Seregin. Mössbauer Effect in Impurity Atoms of Fe^{57m} in Silicon. (E) – 2358 [2810]
– S. M. Gorodetskii, T. D. Dzhafarov, G. S. Kulikov, and R. Sh. Malkovich. Effect of Light on the Movement of a p–n Junction in GaAs. (E) – 2877 [3420]
Bonch-Bruevich, V. A. (See Tolstoi, N. A.) – 1135 [1357]
Bondarenko, T. A., T. I. Galkina, and N. A. Penin. Radiative Electron Capture by Mercury and Germanium Negative Ions. (E) – 1541 [1838]
Bondarenko, V. V., N. I. Vitrikhovskii, and V. A. Tyagai. Electrical Reflection of Mixed $CdS_{1-x}Se_x$ Single Crystals. (E) – 1854 [2209]
Borodkin, A. D. (See Nesterenko, B. A.) – 1036 [1238]
Borovik, A. E. (See Bar'yakhtar, V. G.) – 2718 [3232]
Bosin, M. E. (See Bashmakov, V. I.) – 2076 [2475]
Botaki, A. A., I. N. Gyrbu, and A. V. Sharko. Some Generalities about the Behavior of the Elastic Properties of Alkali Halide Crystals. (R) – 3096 [3671]
Brach, B. Ya. (See Ariya, S. M.) – 166 [213]
– (See Ariya, S. M.) – 2920 [3455]
Brandt, N. B., Kh. Dittmann, and Ya. G. Ponomarev. Metal–Semiconductor Transitions in $Bi_{1-x}Sb_x$ Alloys under Pressure. (T/E) – 2408 [2860]
Bratashevskii, Yu. A., F. N. Bukhan'ko, N. D. Samsonenko, and O. Z. Shapiro. Defects in Synthetic Diamond Powders and the Dynamic Jahn-Teller Effect. (E) – 1809 [2154]
Braude, I. S. Experimental Study of the NaI and NaF Dispersion Curves by Diffuse X-Ray Scattering. (E/T) – 327 [401]
Brazdzhyunas, P. P. (See Kudaba, V. E.) – 743 [896]

Bredikhin, V. I. and V. N. Genkin. Effect of Exciton States on the Nonlinear Characteristics of Semiconductors. (T/E) – 1110 [1329]
Brodov, M. M. (See Bakulin, E. A.) – 2536 [3026]
– (See Bakulin, E. A.) – 3114 [3689]
Bresler, M. S. (See Pikus, G. E.) – 1449 [1734]
Brik, A. B. (See Zevin, V. Ya.) – 2913 [3449]
Brodin, M. S., A. V. Kritskii, and M. I. Strashnikova. Spectral Characteristics of the Anisotropy of Exciton Bands in CdS Crystals. (E) – 475 [587]
– K. A. Dmitrenko, and V. Ya. Reznichenko. Two-Photon Absorption in CdS_xSe_{1-x} Mixed Crystals at Ruby Laser Frequencies. (E) – 1328 [1584]
Brodovoi, V. A. and G. P. Peka. Radiative Recombination of Carriers through Multiply Charged Centers in GaAs(Cu). (E) – 2015 [2406]
Bronshtein, I. M., V. M. Stozharov, and V. P. Pronin. Angular and Energy Distribution of Electrons Inelastically Reflected from Solids. (E) – 2821 [3359]
Brotikovskii, O. I., G. M. Zhidomirov, and V. B. Kazanskii. EPR of Phosphorus Atoms Stabilized on the Surface of Silica Gel at 77°K. (E) – 1010 [1215]
Broude, V. L., A. V. Leiderman, and T. G. Tratas. Energy Spectrum of Isotopic Mixed Naphthalene Crystals. (E/T) – 3058 [3624]
Bryksin, V. V. and Yu. A. Firsov. Interaction of Electrons with Surface Phonons in an Ionic Crystal Plate. (T) – 398 [496]
– Yu. M. Gerbshtein, and D. N. Mirlin. Optical Effects in Alkali-Halide Crystals Due to Surface Vibrations. (E/T) – 1342 [1603]
– Yu. M. Gerbshtein, and D. N. Mirlin. Infrared Absorption by Surface Vibrations in an Ionic Crystal Plate. (E) – 1779 [2125]
– and Yu. A. Firsov. General Theory of Transport Phenomena in a Semiconductor with a Strong Electric Field. (T) – 2729 [3246]
– (See Abaev, M. I.) – 1323 [1578]
Bryzhina, M. F. (See Shakin, O. V.) – 3141 [3714]
Buda, I. S., I. V. Dakhovskii, and L. I. Domanskaya. Phonon-Phonon Interaction in n-Type Si. (T) – 2399 [2849]
Budarina, S. I. and L. F. Konorova. Changes in the Density of Some Semiconductors Caused by Heat Treatment. (E) – 273 [330]
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– (See Abuladze, L. D.) – 2207 [2631]
Bukhan'ko, F. N. (See Bratashevskii, Yu. A.) – 1809 [2154]
Bulaevskii, L. N. Cooling by the Adiabatic Magnetization of Salts with a Linear Chain of Spins. (T) – 2778 [3306]
Bulgakov, A. A. Interaction of Helicon and Sound Waves in a Bounded Solid-State Plasma. (T) – 716 [867]
– É. A. Kaner, S. I. Khankina, and V. M. Yakovenko. Nonlinear Theory of Sound Amplification in a Two-Component Magnetoactive Solid-State Plasma. (E) – 3069 [3637]
Bulygin, A. N. (See Aéro, É. L.) – 1423 [1701]
Buntar', A. G. and A. M. Tkhorivskii. Kinetics of Crystallization of Thin Antimony Films. (E) – 2943 [3481]
Burenkov, Yu. A. (See Nikanorov, S. P.) – 2516 [3001]
– (See Valiev, A. A.) – 2590 [3098]
Burkhanov, A. M. (See Fakidov, I. G.) – 1181 [1414]
Burshtein, K. Ya. and M. A. Kozhushner. Theory of Resonant Inductive Energy Transfer in a Condensed Medium at High Temperatures. (T) – 404 [504]
Bursian, É. V., V. V. Rychgorskii, and Ya. G. Girshberg. Dispersion at Millimeter Wavelengths in Barium Titanate above the Transition Point. (E) – 433 [541]
Bushueva, T. N. (See Yakovlev, Yu. M.) – 952 [1151]
Butikov, E. I., A. S. Kondrat'ev, and A. E. Kuchma. Thermodynamics of an Electron Gas in Crossed Fields. (T) – 2594 [3094]
Butako, N. I. (See Dovgii, Ya. O.) – 995 [1202]
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Bykovskii, Yu. A., V. F. Elesin, E. A. Protasov, M. Yu. Lazarev, and A. G. Rodionov. Spectral Oscillations of the Photomagnetic Effect and of the Photoconductivity in a Quantizing Magnetic Field in n-Type InSb. (E) – 1261 [1504]
– (See Anan'in, O. B.) – 2930 [3465]
Chaban, A. A. Interaction between Acoustic Waves in an Alternating Electric Field. (T) – 2962 [3505]
Chaikovskaya, N. M. (See Soldatov, V. P.) – 2653 [3153]
Chaikovskii, É. F. and L. B. Zagarii. Influence of Temperature on the Anomalous Transmission of X Rays in Potassium Chloride Single Crystals. (E) – 2087 [2486]
– (See Zashkvara, V. V.) – 132 [166]
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– (See Trofimov, V. I.) – 512 [625]
Chausov, G. P., Yu. A. Freiman, and V. G. Manzhelii. Effect of CO Impurities on the Heat Capacity of Solid Argon. (E) – 1248 [1491]
– (See Manzhelii, V. G.) – 2902 [3441]
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Chenskii, E. V. (See Golik, L. L.) – 2978 [3523]
Chepur, D. V. (See Bercha, D. M.) – 1905 [2272]
Chepurnykh, G. K. Effect of Temperature on the Region of Metastable States of an Antiferromagnet. (T) – 1021 [1225]
Cheremskoi, P. G. (See Fuks, M. Ya.) – 1467 [1757]
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Cherevatskii, N. Ya. (See Mityagin, A. Yu.) – 1815 [2159]
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Chervyakov, A. Yu., I. R. Éntin, V. A. Somenkov, S. Sh. Shil'shtein, and A. A. Chertkov. Order–Disorder Transition in $VD_{0.8}$. (E) – 2172 [2587]
– (See Somenkov, V. A.) – 2178 [2595]
Chetkin, M. V. and A. N. Shalygin. Frequency-Independent Faraday Effect in Rare-Earth Garnet Ferrites. (E) – 386 [480]
– Yu. S. Didosyan, and A. I. Akhutkina. Faraday Effect in Yttrium and Dysprosium Orthoferrites. (E) – 2871 [3414]
Chezhina, N. V. (See Ariya, S. M.) – 2920 [3455]
Chisler, É. V. and I. N. Goncharuk. Phase Change in $NaNO_2$ Crystals and Combination Scatter Spectrum in the Region of the Antisymmetrical Vibration of the NO_2^- Anion. (E/T) – 1157 [1384]
– I. T. Savatinova, and V. Yu. Davydov. Polarization of the Raman Bands of the OH Vibrations and Structure of the Hydrogen Bonds in the Ferroelectric Crystals RbH_2PO_4 and RbH_2AsO_4. (E) – 1339 [1599]
– V. Yu. Davydov, and I. T. Savatinova. Effect of Temperature and Phase Transition on the OH Vibration Spectrum of the Ferroelectric RbH_2PO_4. (E) – 1635 [1949]
– and I. N. Goncharuk. Two-Phonon Scattering and Ferroelectric Transition in a $NaNO_2$ Crystal. (E/T) – 2559 [3053]
Chistyakov, V. A. (See Bashkirov, Sh. Sh.) – 570 [689]
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Chupis, I. E. and N. Ya. Piyushko. Ferromagnetic Resonance Linewidth in Ferroelectric Ferromagnets. (T) – 1890 [2252]
Dakhovskii, I. V. (See Buda, I. S.) – 2399 [2849]

Danilov, V. V. (See Korchin, V. A.) – 1777 [2124]
Darinskii, B. M. and V. N. Fedosov. The Structure of 90° Domain Walls in $BaTiO_3$. (T) – 17 [22]
– and Yu. A. Fedorov. Structure of Grain-Boundary Dislocations. (T) – 1008 [1213]
– Theory of the Bordoni Peak. (T) – 1226 [1470]
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– (See Chisler, É. V.) – 1635 [1949]
Deigen, M. F., I. N. Geifman, M. D. Glinchuk, and G. A. Tsintsadze. Determination of Spin-Lattice Relaxation Time from the Thermal Broadening of an ESR Line. (T/E) – 350 [434]
– I. N. Geifman, N. I. Deryugina, V. M. Maevskii, and N. I. Vitrikhovskii. Determination of New Crystal-Field Parameters in the Form of Electric Dipole Moments in Mixed A_2B_4–$A_2'B_4'$ Crystals. (T/E) – 779 [930]
– V. S. Vikhnin, and M. D. Glinchuk. Theory of E Resonance and EPR with Electrical Stimulation. (T) – 1510 [1807]
– M. D. Glinchuk, and V. S. Vikhnin. Effect of the Electric Fields of Lattice Defects on the Shape and Width of Paraelectric Resonance Lines. (T) – 2270 [2714]
Delyagin, N. N. and É. N. Kornienko. Hyperfine Magnetic Fields for ^{119}Sn Atoms in Ferromagnetic CoFe. (E) – 1254 [1497]
Demin, V. N. (See Zashkvara, V. V.) – 2836 [3376]
Demikhovskii, V. Ya. and A. P. Kopasov. Nonlinear Resonance Interaction of Electrons with Sound in a Quantizing Magnetic Field. (T) – 2068 [2468]
Demurov, D. G. and Yu. N. Venevtsev. Character of Phase Transition of Ferroelectric $KTaO_3$. (E) – 553 [669]
Dem'yanenko, V. P., Yu. P. Tsyashchenko, and É. M. Verlan. Infrared Absorption by $Co_3^{2-} \cdot M^{2+}$ Complexes in KCl and KBr Lattices. (E) – 767 [919]
– (See Verlan, É. M.) – 2057 [2459]
Denisenko, G. A. and E. P. Khaimovich. Direct Processes of Spin-Lattice Relaxation in Crystals Containing Rare-Earth Ions. (T) – 1539 [1836]
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Deryugina, N. I. (See Deigen, M. F.) – 779 [930]
Diatroptov, D. B. and A. B. Vaganov. Equatorial Kerr Effect Involving Very Small ($\sim 10^{-7}$) Changes in the Intensity of Light. (E) – 788 [937]
Didosyan, Yu. S. (See Chetkin, M. V.) – 2871 [3414]
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Diskovskii, V. A. (See Kuz'min, E. V.) – 2757 [3281]
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Dobrovol'skii, V. N. and Fang Wang An. Longitudinal Magnetoresistance of an Electron-Hole Plasma in Germanium. (E) – 206 [263]
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Dombrovski, L. (See Pekoshevski, E.) – 321 [393]
Doroshev, V. D., N. M. Kovtun, and V. N. Seleznev. Nuclear Magnetic Resonance Spectra of Fe^{57} Nuclei in Lithium Ferrite. (E) – 911 [1098]
– S. M. Zhilyakov, N. M. Kovtun, E. P. Naiden, and V. M. Siryuk. Nuclear Magnetic Resonance in Lithium-Aluminum Ferrites. (E) – 2752 [3275]
Dovgii, Ya. O., N. I. Butsko, V. N. Korolyshin, and E. G. Moroz. Optical Properties of Ag_3AsS_3 Single Crystals. (E) – 995 [1202]
Drabkin, G. M. and I. I. Marchik. Coherent Excitation of Spin Waves and Doppler Effect Experienced by Polarized Neutrons. (T) – 258 [316]
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– (See Garber, R. I.) – 331 [406]
– (See Garber, R. I.) – 339 [416]
Dravnov, L. N., D. A. Kichigin, and É. A. Chernina. Temperature Dependence of the Width and Shape of the EPR Lines of the V^{4+} Ion in Single Crystals of Corundum. (E) – 1246 [1489]
Driyaev, D. G., V. Á. Melik-Shakhnazarov, and D. M. Budzhiashvili. Effect of a Pulsed Electric Field on the Vibrations of LiF Crystals in an Alternating Electric Field. (E) – 2936 [3471]
Drokin, A. I. (See Bayukov, O. A.) – 2803 [3338]
Dubovskii, L. B. Reflection of Electrons from a Metal Surface. (T) – 1960 [2340]
Dubovskii, O. A. Shape of the Exciton Absorption Lines in Orientationally Disordered Crystals. (T) – 2541 [3032]
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Dukhovskaya, E. L. and Yu. G. Saksonov. Effect of the Crystal Structure of $Bi_{2-2n}Ca_{2n}Fe_{4-n}V_nO_2$ Compounds on the Magnitude of the Exchange Interaction. (E) – 181 [232]
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D'yakonov, M. I. and V. I. Perel'. Spin Relaxation of Conduction Electrons in Noncentrosymmetric Semiconductors. (T) – 3023 [3581]
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Egorov, N. V., G. N. Fursei, and S. P. Manokhin. Origin of Emission Current Saturation in Field Emission from Semiconductors. (E) – 1525 [1823]
– G. N. Fursei, and S. P. Manokhin. Generality of Autoelectron Emission from n-Type and p-Type Semiconductors. (E) – 2612 [3110]
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– A. V. Rudnev, and A. S. Shulakov. X-Ray Spectra and Electronic Structure of Pt and Au. (E) – 2525 [3013]
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– (See Rudnev, A. V.) – 2083 [2483]
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– (See Bobrova, E. A.) – 2982 [3528]
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Godovskii, Yu. K., V. S. Papkov, A. I. Slutsker, É. E. Tomashevskii, and G. L. Slonimskii. Energetic Aspects of Polymer Degradation. (E/T) – 1918 [2289]
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Golovshchikova, G. L., V. A. Isupov, and I. E. Myl'nikova. Peculiarities of the Dielectric Polarization of Cadmium Pyroniobate. (E) – 1967 [2349]
Golub, A. A. and L. Z. Kon. Investigation of Superconductivity in Semiconductors. (T) – 2054 [2455]
Golub', L. M. (See Metsik, M. S.) – 1069 [1278]
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Golubeva, L. A., E. V. Moshkova, and A. A. Shishelov. Change of Lattice Constant on X-Ray Irradiation of an Impure Single Crystal of Lithium Fluoride. (E) – 2887 [3428]
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– (See Chisler, É. V.) – 2559 [3053]
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Gorodetskii, A. E., V. I. Trofimov, and V. M. Luk'yanovich. Effect of Interphase Interaction on the Character of Nucleation of a Condensed Phase. (E) – 2555 [3049]

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– and A. N. Knysh. Interaction of Oxygen with the (0001) Face of Rhenium. (E) – 2119 [2521]
– and A. A. Yas'ko. Structure and Work Function of Antimony Films on a Tungsten (100) Surface. (E) – 2928 [3462]
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Goryaga, A. N., T. Ya. Gridasova, and A. K. Gapeev. Magnetostriction of the Ferrite $NiFe_{0.4}Cr_{1.6}O_4$ in the Tetragonally Distorted Phase. (E) – 479 [592]
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Gross, E. F., S. A. Permogorov, V. V. Travnikov, and A. V. Sel'kin. Light Excitons in CdS Crystals. (E) – 578 [699]
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Grunin, V. S. and G. A. Pavlova. EPR of Fe^{3+} Ions in Cristobalite and Quartz Glass. (E) – 637 [772]
Gubankov, V. N. and K. K. Likharev. Nonlinear Microwave Properties of Superconducting Thin Films in the Mixed State. (T/E) – 99 [125]
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Il'menkov, G. V., I. F. Mironov, D. N. Nasledov, Yu. S. Smetannikova, B. A. Shustrov, and V. K. Yarmarkin. Magnetic Hyperfine Structure of the Nuclear Gamma Resonance Spectra on the Fe^{57} Nuclei in InSb, GaSb, and Ge. (E) – 1176 [1407]
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Kalinina, N. A. and V. A. Stepanov. Influence of an Induced Elastic Deformation upon Internal Friction in Polymers. (E) – 2586 [3086]
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Kask, N. E., L. S. Kornienko, and M. Tabak. Spin-Lattice Relaxation in the $\Gamma_8(Dy^{3+}:CaF_2, Nd^{3+}:CaF_2)$ Quadruplets. (E/T) – 36 [46]
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Khrabrov, V. I., Ya. S. Shur, Yu. M. Yakovlev, V. G. Gass, and A. G. Titova. Torque Curves of Yttrium Orthoferrite in Strong Pulsed Magnetic Fields. (E/T) – 2544 [3035]
Khutsishvili, É. V., V. K. Subashiev, A. A. Kukharskii, M. G. Kekua, and N. P. Kekelidze. Effective Mass and Relaxation Time of Electrons in Solid Solutions of the Form $Si_{0.85}Ge_{0.15}$. (E/T) – 1513 [1810]

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Kiryukhin, N. N. and Ya. A. Monosov. Electromagnetic Radiation from a Parametrically Excited Ferrite. (E) – 1631 [1944]
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Kizhaev, S. A., P. V. Usachev, and V. M. Yudin. Magnetic Susceptibility of $HgCo(CNS)_4$. (E) – 2380 [2829]
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– (See Abaev, M. I.) – 1323 [1578]
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– (See Kessel', A. R.) – 2522 [3009]
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Korneev, V. P., I. P. Suzdalev, V. I. Gol'danskii, T. Ya. Kureneva, E. F. Makarov, and A. S. Plachinda. A Study of Spin-Spin Relaxation Using the Mössbauer Effect. (E) – 291 [354]
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– and Yu. B. Patrikeev. Heat Capacity of Cerium–Lanthanum and Cerium–Lutecium Alloys at Very Low Temperatures. (E) – 1527 [1824]
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– and T. P. Smereka. Study of Cerium Adsorption on a Tungsten Single Crystal in a Field-Emission Microscope. (E) – 640 [776]
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Parfen'eva, L. S., I. A. Smirnov, and V. V. Tikhonov. Thermal Conductivities of the Fluorides of Cu, Ba, and Sr. (E) – 1267 [1509]
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Pashaev, Kh. M. (See Zhernov, A. P.) – 2190 [2610]
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Patrikeev, Yu. B. (See Nikulin, E. I.) – 999 [1206]
– (See Nikulin, E. I.) – 1527 [1824]
– (See Nikulin, E. I.) – 1819 [2163]
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Paukov, I. E. and F. S. Rakhmenkulov. Phase Transitions in Rubidium Superoxide. (E) – 1846 [2198]
Pautov, D. A. Surface Self-Diffusion of Niobium in an Electric Field. (E) – 997 [1204]
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Pavlov, N. M., M. I. Iglitsyn, M. G. Kosaganova, V. N. Solomatin, and Yu. V. Barinov. EPR Spectra of Irradiated n-Type Silicon Carbide. (E) – 2363 [2814]
Pavlov, P. V. (See Pashkov, V. I.) – 867 [1044]
Pavlov, S. T. (See Lang, I. G.) – 3083 [3654]
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Pavlov, V. S., S. K. Turkov, É. N. Bessonova, and V. S. Postnikov. Influence of the Concentration of Point Defects on the Internal Friction in Polycrystalline Lead Zirconate-Titanate. (E) – 745 [897]
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Pekoshevskii, E., Ya. Suval'skii, and L. Dombrovskii. Magnetic Hyperfine Structure of the Nuclear Levels of ^{61}Ni in Zn–Ni Ferrite above the Curie Temperature, Observed Using Mössbauer Spectroscopy. (E) – 321 [393]
Pelikh, L. N. (See Anders, A. G.) – 1624 [1936]
Pel'ts, S. D. and A. E. Karpel'son. Tertiary Pyroeffect and Potential Distribution in Piezoelectrics. (T) – 2606 [3104]
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Perekalina, T. M., S. S. Fonton, Yu. G. Magakova, and R. A. Voskanyan. Magnetic Anisotropy of Erbium Ferrite Garnet. (E) – 2693 [3202]
Perel', V. I. (See D'yakonov, M. I.) – 3023 [3581]
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Perepechko, I. I. and V. E. Sorokin. Velocity of Ultrasound and Quantum-Mechanical Tunneling Transitions in Polymers. (E) – 782 [932]
Pereverzeva, L. P., N. Z. Pogosskaya, Yu. M. Poplavko, V. I. Pakhomov, I. S. Rez, and G. B. Sil'nitskaya. Dielectric Anomalies in Crystals of KH_2PO_4, KD_2PO_4, and RbH_2PO_4 at High Temperatures. (E) – 2690 [3199]
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Personov, R. I., É. D. Godyaev, and O. N. Korotaev. Line Shapes in Shpol'skii Luminescence Spectra of Organic Compounds at 4.2°K. (E) – 88 [111]
– I. S. Osad'ko, É. D. Godyaev, and E. I. Al'shits. Phonon Wings and Phonon-Free Lines in the Spectra of Doped n-Paraffin Crystals. (E/T) – 2224 [2653]
Peskovatskii, S. A. and V. M. Shul'ga. Concentration and Temperature Dependences of the Relaxation Time in Ruby at Superlow Temperatures. (E) – 486 [599]
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– (See Naumenko, I. G.) – 2740 [3260]
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Petrov, A. A. Explosive Effects in the Plastic Deformation of Solids on "Bridgman Anvils". (E) – 1519 [1816]

Petrov, A. E., V. I. Petinov, I. V. Platé, E. A. Fedorova, and M. Ya. Gen. Magnetic Properties of Small Aerosol Particles of Cobalt. (E) – 1318 [1573]
Petrov, A. V. (See Kovalev, N. N.) – 232 [291]
Petrov, I. N., O. V. Sorokin, and E. M. Sher. Electrical Properties of Calcium-Strontium Oxide in Barium Vapor. (E) – 2478 [2951]
– (See Kovalev, N. N.) – 1980 [2364]
Petrov, M. I. (See Bayukov, O. A.) – 2803 [3338]
Petrov, M. P., G. A. Smolenskii, V. F. Nashin, and A. P. Paugurt. Interaction of Nuclear Moments with Parametric Spin Waves in Ferrites. (E/T) – 1989 [2374]
– and A. V. Kunevich. Nuclear Magnetic Resonance in Ferroxplana Ferrites. (E) – 2786 [3316]
Petrov, V. A. and V. B. Sandomirskii. Reflection of Soft X Rays from a "Size-Quantized" Film. (T) – 777 [928]
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Petrova, M. L. and L. D. Rozenshtein. Field Effect and Slow States in Thin Films of Organic Semiconductors. (E) – 1948 [2325]
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Pinsker, T. N. (See Volkov, V. A.) – 1138 [1360]
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Plekhanov, V. G. Investigation of the Low-Temperature Photo- and X-Ray Luminescence of $PbCl_2$ Crystals. (E) – 3112 [3637]
Pletnev, M. N. (See Bartenev, G. M.) – 1005 [1211]
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Pokrovskii, Ya. E. and K. I. Svistunova. Diffusion of Nonequilibrium Charge Carriers in Germanium at Low Temperatures. (E) – 1241 [1485]
– and K. I. Svistunova. Role of Indirect Optical Transitions in the Absorption of Light by Holes in Germanium. (E) – 2334 [2788]
Polikhronidi, N. G. (See Bagdуev, G. B.) – 2775 [3303]
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Popkov, Yu. A., V. I. Fomin, and L. T. Kharchenko. Mandelstam-Brillouin Scattering of Light in Manganese Fluoride Crystals ($KMnF_3$, $RbMnF_3$, MnF_2). (E) – 1360 [1626]
– V. V. Eremenko, and V. I. Fomin. Raman Scattering and Phase Transitions in a $KMnF_3$ Crystal. (E) – 1701 [2028]
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Pospelov, Yu. A. Theory of the Electrical Resistance of Graphite. (T/E) – 1943 [2319]
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– (See Manokhin, Yu. P.) – 854 [1025]
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– (See Naumov, A. N.) – 885 [1066]
Pustovoit, V. I. and Yu. P. Mukhortov. Theory of the Generation of Acoustic Waves in a Magnetic Field. (T) – 2564 [3059]
– (See Maev, R. G.) – 913 [1101]
Pyn'ko, V. G., L. I. Kveglis, and V. S. Korchmar'. Epitaxial Growth of Ti, V, Cr, and Mn Films on LiF and NaCl Crystals. (E) – 2800 [3334]
Radchenko, I. S. and P. P. Safonenko. Colloidal Color Centers in Lead-Activated Alkali-Halide Crystals. (T) – 3132 [3706]
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Red'kin, V. S., V. V. Zashkvara, M. I. Korsunskii, and E. V. Tsveiman. Auger Electron Spectrum of Osmium in the Energy Range up to 300 eV. (E) – 1269 [1511]
– (See Zashkvara, V. V.) – 132 [166]
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– (See Zashkvara, V. V.) – 2836 [3376]
Regel', A. R., A. A. Andreev, B. I. Kazandzhan, and M. Mamadaliev. Hall Effect in Sb_2Se_3 Liquid Semiconductor. (E/T) – 2261 [2702]
– A. A. Andreev, M. Mamadaliev, and B. T. Melekh. Hall Effect in Liquid Germanium Selenide. (E) – 2809 [3345]
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Regel', V. R., T. B. Boboev, A. M. Leksovskii, and L. G. Orlov. Influence of Ultraviolet Irradiation on the Kinetics of Growth of Main Cracks in Polymers. (E) – 522 [635]
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Rembeza, S. I. (See Manokhin, Yu. P.) – 854 [1025]
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– (See Smirnov, B. I.) – 2769 [3295]
Samokhvalov, A. A., N. N. Loshkareva, and V. G. Bamburov. Shift of the Absorption Edge in $Eu_{1-x}Ca_xO$ Solid Solutions. (E) – 1574 [1878]
– Yu. N. Morozov, and T. I. Arbuzova. Paramagnetic Properties of Certain Divalent Europium Compounds. (E) – 2246 [2683]
– V. S. Babushkin, V. G. Bamburov, and N. I. Lobachevskaya. Paramagnetic Resonance Linewidth in Dilute Divalent-Europium Compounds. (E/T) – 2530 [3019]
– (See Sokolova, G. K.) – 1042 [1244]
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Sarnatskii, V. M., V. A. Shutilov, T. D. Levitskaya, B. I. Kidyarov, and P. L. Mitnitskii. Nuclear Magnetic Resonance of Li^7 in Lithium Iodate Crystals. (E) – 2021 [2413]
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Savechenkova, S. F., Yu. N. Tsiovkin, T. D. Zotov, and N. V. Volkenshtein. Peculiarities of the Magnetic Properties of the Alloy $Fe(Pd_{0.55}Pt_{0.50})_3$. (E) – 991 [1198]
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Reznik, I. M. and K. B. Tolpygo. Renormalization of the Cyclotron Mass of a Current Carrier due to Its Interaction with Valence Electrons. (T) – 1164 [1392]
Reznikov, B. A. and G. S. Titova. Mechanism of Plastic Deformation of Crystals during Quenching. (E) – 1190 [1426]
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Anisotropic Silver Centers in the KCl Crystal. (E) N. I. Mel'nikov, P. G. Baranov, R. A. Zhitnikov, and N. G. Romanov – 1909 [2276]

Magnetic Susceptibility Study of Color Centers in CeO_2 Crystals with Gd Impurity Ions. (E/T) V. E. Adamyan, I. V. Vinokurov, N. A. Mantashyan, and S. V. Stepanyan – 1934 [2309]

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Field Effect and Slow States in Thin Films of Organic Semiconductors. (E) M. L. Petrova and L. D. Rozenshtein – 1948 [2325]
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Study of the Pyroelectric Effect in Thin Films of Triglycine Sulfate and Barium Titanate. (E) N. D. Gavrilova, Yu. A. Zvirgzd, V. K. Novik, and V. G. Poshin – 1506 [1803]
Electric Strength of Thin Pyroactivated Films of $SiO_2 \cdot Al_2O_3$ Glasses. (E) V. F. Korzo – 1508 [1805]
Calculation of the Effective Recombination Cross Section and Distribution Function of Free Carriers for a Charged Center. (T) Yu. Kh. Kalnin' – 1529 [1826]
Collision Broadening of Landau Levels in the Nonlinear Theory of Transverse Conductivity. (T) L. I. Magarill and S. K. Savvinykh – 1558 [1858]
Effect of the Structure of a Vacuum Condensate on its Electrical Properties. (E) L. S. Palatnik, B. T. Boiko, P. A. Panchekha, and V. P. Sapelkin – 1880 [2240]
Galvanomagnetic Kinetic Coefficients in an Arbitrary Magnetic Field. (T) A. A. Kukharskii and V. K. Subashiev – 1894 [2258]
Low-Temperature Conductivity by Hot Electrons. (T) Z. S. Kachlishvili – 1903 [2269]
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Effect of Surface Migration of Nickel Atoms on the Ionic Component of Cathode Emission from Tungsten. (E) A. A. Adylov, V. I. Veksler, and A. M. Reznik – 1651 [1968]
Secondary Electron Emission from Single Crystals by a Scanning Method. (E) Yu. A. Morozov and E. B. Osarskov – 1721 [2051]
Effect of Oxygen Adsorption on the Current-Voltage Characteristic of the Field-Emission Current from p-Ge. (E) R. Z. Bakhtizin and N. V. Mileshkina – 1727 [2056]
Spectra of Electrons Quasielastically Reflected from Metals, Semiconductors, and Dielectrics. (E) A. R. Shul'man and Yu. A. Morozov – 1783 [2129]
Field Effect and Slow States in Thin Films of Organic Semiconductors. (E) M. L. Petrova and L. D. Rozenshtein – 1948 [2325]
Reflection of Electrons from a Metal Surface. (T) L. B. Dubovskii – 1960 [2340]
Calculation of the Electron Emission Probability from Dielectrics in the Case of Secondary Electron Emission and the External Photoeffect. (T) F. G. Baksht, V. G. Ivanov, and B. Ya. Moizhes – 2436 [2896]
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Effective Mass and Relaxation Time of Electrons in Solid Solutions of the Form $Si_{0.85}Ge_{0.15}$. (E/T) É. V. Khutsishvili, V. K. Subashiev, A. A. Kukharskii, M. G. Kekua, and N. P. Kekelidze – 1513 [1810]

Helicon Resonance in Semiconductors. (E) V. I. Baibakov and V. N. Datsko – 1531 [1827]
Effect of the Fermi Energy on the Decomposition Kinetics of a Solid Solution of Chromium in Silicon. (E/T) A. A. Zolutukhin and L. S. Milevskii – 1598 [1906]
Recombination Radiation of Indium Arsenide at High Excitation Levels. (E) G. N. Galkin, T. G. Lalaeva, F. F. Kharakhorin, and E. V. Shatkovskii – 1645 [1961]
Vibration Equations of Crystals of Group-Zero Elements, Allowing for the Deformation of the Electron Shells. (T) M. A. Belogolovskii, K. B. Tolpygo, and E. P. Troitskaya – 1765 [2109]
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Exchange and Exchange-Deformation Splitting of Exciton Levels in a Cuprous Oxide Crystal. (T) V. A. Kiselev and A. G. Zhilich – 2008 [2398]
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Displacement of the Magnetic Moments of Fe^{3+} Ions from the Nuclei in a Type Z Hexagonal Ferrite. (E) R. A. Sizov – 1744 [2081]
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Elastic Nonlinearity of Yttrium Iron Garnet. (E) A. N. Grishmanovskii, N. K. Yushin, V. L. Bogdanov, and V. V. Lemanov – 1537 [1833]
Weak Ferromagnetism of Molybdenum Trifluoride. (E) Ya. V. Vasil'ev, K. A. Khaldoyanidi, A. A. Opalovskii, and V. M. Yudin – 1543 [1840]
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Magnetophonon Oscillations of Longitudinal Magnetoresistance in n-InP. (E) R. I. Bashirov, A. Yu. Mollaev, and N. V. Siukaev – 2892 [3432]
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Formation of Domains of Metastable Phases during Solid-State Phase Transitions. (T) A. L. Roitburd – 1523 [1820]

Spontaneous Polarization of a KH_2PO_4 Crystal near the Curie Point. (E) B. A. Strukov, M. A. Korzhuev, A. Baddur, and V. A. Koptsik – 1569 [1872]

Effect of the Fermi Energy on the Decomposition Kinetics of a Solid Solution of Chromium in Silicon. (E/T) A. A. Zolotukhin and L. S. Milevskii – 1598 [1906]

Effect of Temperature and Phase Transition on the OH Vibration Spectrum of the Ferroelectric RbH_2PO_4. (E) É. V. Chisler, V. Yu. Davydov, and I. T. Savatinova – 1635 [1949]

Phase Transition in Metallic Films on Dielectric Surfaces. (T) E. I. Kats and L. I. Trusov – 1669 [1990]

Thermal Transitions in Systems with Undisplaced Adiabatic Potentials. (T) É. P. Sinyavskii – 1673 [1995]

Raman Scattering and Phase Transitions in a $KMnF_3$ Crystal. (E) Yu. A. Popkov, V. V. Eremenko, and V. I. Fomin – 1701 [2028]

Critical Temperature of the Superconducting State of Certain Metals of the Series Y–Pd. (T) M. I. Korsunskii, Ya. E. Genkin, and V. G. Zavodinskii – 1796 [2141]

Thermal Expansion and the P–T Diagram for a Low-Temperature, Displacement-Type Phase Transition. (E/T) D. E. Khmel'nitskii and V. L. Shneerson – 1813 [2158]

Phase Transitions in Rubidium Superoxide. (E) I. E. Paukov and F. S. Rakhmenkulov – 1846 [2198]

Decomposition of a Solid Solution of Strontium in a Sodium Chloride Crystal. (E) M. I. Abaev – 1953 [2331]

Investigation of the Bi_2Te_3 Phase Diagram at High Temperatures and Pressures. (E) L. F. Vereshchagin, É. Ya. Atabaeva, and N. A. Bendeliani – 2051 [2452]

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First-Order Phase Transition in KD_2PO_4 Crystals. (E) B. A. Strukov, A. Baddur, and I. A. Velichko – 2085 [2484]

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Precipitation of a Solid Solution of Rubidium in Sodium Chloride. (E) M. I. Abaev – 2096 [2495]

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Abnormal Phase Transition in the Vanadium Deuteride, V_2D. (E) V. A. Somenkov, I. R. Éntin, A. Yu. Chervyakov, S. Sh. Shil'shtein, and A. A. Chertkov – 2178 [2595]

Pore Coalescence in Crystals Having Vacancy Sinks. (E/T) Ya. E. Geguzin, V. G. Kononenko, and V. M. Dunaevskii – 2219 [2646]

Electrical Properties and Decomposition of the Solid Solution of Iron in Silicon. (E) B. I. Boltaks, M. K. Bakhadyrkhanov, and G. S. Kulikov – 2240 [2675]

Effect of the Glass–Crystal Transition on the Local Surroundings of Tellurium Atoms in As_2Te_3 and $As_2Se_3 \cdot As_2Te_3$. (E) P. P. Seregin and L. N. Vasil'ev – 2258 [2699]

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Theory of E Resonance and EPR with Electrical Stimulation. (T) M. F. Deigen, V. S. Vikhnin, and M. D. Glinchuk – 1510 [1807]

EPR Spectrum of Mn^{2+} Impurity in Zinc Molybdate Single Crystal. (E) A. G. Anders, V. A. Moiseev, A. I. Zvyagin, and M. I. Kobets – 1535 [1831]

Electron Paramagnetic Resonance of Terbium Ions in γ-Irradiated CaF_2 Crystals Containing Two Rare-Earth Impurities. (E) L. S. Kornienko and A. O. Rybaltovskii – 1609 [1919]

EPR Spectrum of the Co^{2+} Ion in Triclinic $ZnMoO_4$ Crystals. (E) A. G. Anders, A. I. Zvyagin, N. M. Nesterenko, and L. N. Polikh – 1624 [1936]

Influence of Phonon Heating on the Resonant Change of the Mobility in the Case of EPR Saturation. (T) L. D. Abuladze, L. L. Buishvili, and V. P. Kalashnikov – 1662 [1981]

EPR of Tetragonal Ho^{3+} Ion Centers in CaF_2 Crystals. (E) L. S. Kornienko and A. O. Rybaltovskii – 1785 [2131]

Paramagnetic Resonance of Conduction Electrons in Colloidal Sodium in Additively Colored NaCl Crystals. (E) A. Ya Vitol, É. G. Kharakhash'yan, F. G. Cherkasov, and K. K. Shvarts – 1787 [2133]

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Electric Field Effect in EPR Spectra of Ions in the S State. (T) E. S. Kovalenko – 1901 [2266]

EPR Spectra and State of Fe^{3+} Ions in SnO_2. (E/T) V. F. Anufrienko, L. G. Yandralova, and D. V. Tarasova – 1970 [2353]

Electron Paramagnetic Resonance of Cu^{2+} Ions in β-Rb_2SO_4. (E) R. Yu. Abdulsabirov, T. B. Bogatova, Yu. S. Greznev, and M. M. Zaripov – 2091 [2490]

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Discrete Saturation of EPR Lines in 6H SiC:N. (E) B. D. Shanina, I. M. Zaritskii, and A. A. Konchits – 2503 [2985]

Paramagnetic Resonance Linewidth in Dilute Divalent-Europium Compounds. (E/T) A. A. Samokhvalov, V. S. Babushkin, V. G. Bamburov, and N. I. Lobachevskaya – 2530 [3019]

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Reabsorption of Light and Photoconductivity of Anthracene Crystals. (E/T) V. A. Benderskii and A. G. Lavrushko – 1072 [1282]

Spectral Oscillations of the Photomagnetic Effect and of the Photoconductivity in a Quantizing Magnetic Field in n-Type InSb. (E) Yu. A. Bykovskii, V. F. Elesin, E. A. Protasov, M. Yu. Lazarev, and A. G. Rodionov – 1261 [1504]

Investigations of Pulsed Photocurrents in Anthracene Crystals. (T/E) V. A. Benderskii and A. G. Lavrushko – 1280 [1528]

Relation between the Energy Structure of Organic Semiconductors and Their Photoemission Properties. (E/T) A. A. Zagrubskii and F. I. Vilesov – 1927 [2300]

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